Antibody-Drug Conjugates (ADCs)

Antibody-Drug Conjugates, or ADCs, are designed to precisely deliver cytotoxins to cancer cells with potential to treat both solid tumors and hematologic cancers.

**Mechanism of Action**

ADCs use a chemical linker to connect cytotoxins – such as chemotherapy – with an antibody. This enables the ADC to target and bind to cell-surface proteins called antigens that can be found on cancer cells and release its cell-killing drugs only after it has been internalized by the cancer cell. As a result, ADCs have the potential to selectively kill cancer cells and limit side effects for patients.

**Pfizer ADC Portfolio**

Pfizer is using its understanding of the biology of cancer to explore a number of antibody-linker-cytotoxin combinations and build proprietary ADC platforms to develop a diverse ADC toolkit.

**Late-Stage Assets**

- **Inotuzumab ozogamicin** is an investigational ADC comprised of a CD22-directed mAb linked to the cytotoxic agent calicheamicin and is being studied in relapsed/refractory acute lymphoblastic leukemia (ALL).
- **MYLOTARG** (gemtuzumab ozogamicin) is an ADC comprised of a CD33-directed mAb that is linked to the cytotoxic agent calicheamicin and has been studied in acute myeloid leukemia (AML).*

**Early-Stage Investigational Assets**

- **PF-06650808** is an anti-NOTCH3 ADC that is comprised of a humanized antibody targeting the NOTCH3 receptor, which is overexpressed in a number of human cancers, linked to an auristatin-based cytotoxic agent.
  
  In a Phase 1 study **PF-06650808** (anti-Notch3) showed an acceptable safety profile in patients with advanced malignancies, including triple negative breast cancer, ovarian cancer and non-small cell lung cancer. PF-06650808 also showed early indication of anti-tumor activity in an unselected patient population.

- **PF-06647020** is an anti-PTK7 ADC that is comprised of a humanized monoclonal antibody directed against PTK7, which is also expressed in many tumor types, linked to an auristatin microtubule inhibitor payload.
  
  In a Phase 1 study **PF-06647020** (anti-PTK7) showed an acceptable safety profile in patients with advanced malignancies, including triple negative breast cancer, ovarian cancer and non-small cell lung cancer. PF-06647020 also showed early indication of anti-tumor activity in an unselected patient population.²

- **PF-06647263** is an anti-EFNA4 ADC that is comprised of a humanized monoclonal antibody against Ephrin-A4 (EFNA4), which is overexpressed in a number of human tumors, linked to the cytotoxic agent calicheamicin.
  
  In a Phase 1 study **PF-06647263** (anti-EFNA4) showed an acceptable safety profile in patients with advanced malignancies, including triple negative breast cancer and ovarian cancer.³ Results showed early indication of anti-tumor activity in an unselected patient population.

* = MYLOTARG is not approved in the U.S.
